

91 thereof, wherein said isolated polynucleotide includes at least one polymorphic site shown in Table 1.

92 33. (Three Times Amended) An isolated polynucleotide for determining whether a subject has an increased likelihood of having the disease-associated allele 24d1 of the Hereditary Hemochromatosis gene comprising at least 18 consecutive bases and up to about 100 consecutive bases of the sequence shown in SEQ ID NOS:1 or 2, or the complement thereof, wherein said isolated polynucleotide includes at least one polymorphic site shown in Table 1.

Please add new Claims 80-99:

93 80. (New) An isolated polynucleotide for determining whether a subject has an increased likelihood of having the disease-associated allele 24d1 of the Hereditary Hemochromatosis gene consisting essentially of at least 8 consecutive bases and up to about 100 consecutive bases of the sequence shown in SEQ ID NOS:1 or 2, or the complement thereof, wherein said isolated polynucleotide includes at least one polymorphic site shown in Table 1.

81. (New) The isolated polynucleotide of Claim 80, wherein the polymorphic site is at base 61465 of SEQ ID NO:1.

82. (New) The isolated polynucleotide of Claim 80, wherein the polymorphic site is at base 35983 of SEQ ID NO:1.

83. (New) A pair of isolated polynucleotides as in Claim 80.

84. (New) A kit comprising an isolated polynucleotide of Claim 80.

85. (New) An isolated polynucleotide for determining whether a subject has an increased likelihood of having the disease-associated allele 24d1 of the Hereditary Hemochromatosis gene consisting essentially of at least 18 consecutive bases and up to about

100 consecutive bases of the sequence shown in SEQ ID NOS:1 or 2, or the complement thereof, wherein said isolated polynucleotide includes at least one polymorphic site shown in Table 1.

86. (New) The isolated polynucleotide of Claim 85, wherein the polymorphic site is at base 61465 of SEQ ID NO:1.

87. (New) The isolated polynucleotide of Claim 85, wherein the polymorphic site is at base 35983 of SEQ ID NO:1.

88. (New) A pair of isolated polynucleotides as in Claim 85.

89. (New) A kit comprising an isolated polynucleotide of Claim 85.

90. (New) An isolated polynucleotide for determining whether a subject has an increased likelihood of having the disease-associated allele 24d1 of the Hereditary Hemochromatosis gene consisting essentially of at least about 100 consecutive bases and up to about 235 consecutive kilobases of the sequence shown in SEQ ID NOS:1 or 2, or the complement thereof, wherein said isolated polynucleotide includes at least one polymorphic site shown in Table 1.

91. (New) The isolated polynucleotide of Claim 90, wherein the polymorphic site is at base 61465 of SEQ ID NO:1.

92. (New) The isolated polynucleotide of Claim 90, wherein the polymorphic site is at base 35983 of SEQ ID NO:1.

93. (New) A pair of isolated polynucleotides as in Claim 90.

94. (New) A kit comprising an isolated polynucleotide of Claim 90.

93

95. (New) An isolated polynucleotide for determining whether a subject has an increased likelihood of having the disease-associated allele 24d1 of the Hereditary Hemochromatosis gene consisting essentially of at least about 300 consecutive bases and up to about 235 consecutive kilobases of the sequence shown in SEQ ID NOS:1 or 2, or the complement thereof, wherein said isolated polynucleotide includes at least one polymorphic site shown in Table 1.

96. (New) The isolated polynucleotide of Claim 95, wherein the polymorphic site is at base 61465 of SEQ ID NO:1.

97. (New) The isolated polynucleotide of Claim 95, wherein the polymorphic site is at base 35983 of SEQ ID NO:1.

98. (New) A pair of isolated polynucleotides as in Claim 95.

99. (New) A kit comprising an isolated polynucleotide of Claim 95.